# **Log CHARA/VEGA 2020-06-13**

Observers: Fred (VEGA), Anthony the Old (Report) Norm (Mt Wilson)

## **UTC** time:

03:05 Starting Observing Night

# E1 POP1 B1 - <u>S1 POP5 B2</u> - W1 POP1 B3 <u>V01 (R. Ligi) - HD133112</u>

OPD offset: +150µm (left)

Target HD133112 (known also as HR5599)

Cal1 = HD124988 Cal2 = HD154445

**LABAO = HD132052**;

Check1 = HD132052 (Bright but big mR=4.2 D=0.64mas) Check2 = HD129956 (Small but dim mR=5.6 D=0.23mas)

03:15: Pointing to the Check1.

03:38: NIRO aligned on Check1

03:40: Pupils are good on VEGA.

03:45: Very ugly fringes on CLIMB r0~4cm

03:50: Flux optimized on VEGA. Going to Check2

04:10: Norm says he locked the fringes but where are they?

04:12: That's ugly! CLIMB cannot track on that!!!!

04:13:Maybe we have a peak on VEGA but that's also beurk

04:15: Norm will try to realign NIRO. It seems that with the AOs on we get misaligned beam at each new preset.

04:18: Fred also found that VEGA was misaligned too.

04:20: A bit more flux on CLIMB but still super badly locked fringes. Maybe there's a problem with AOs.

04:40: Norm went to a bright target to do flats for the AOs.

05:08: Norm says he cannot improve the situation. Maybe the seeing is really too bad. r0 is still of the order of 4cm.

05:30: Back to check2 after full realignment. AOs are off

05:37: Still same awful fringes on CLIMB.

06:00: We'll try to go to an easier config and target.

# E2 POP1 B1 - E2 POP2 B2 - W1 POP1 B3

# V70 (R. Klement) – P Cyg

OPD offset: +150μm (left)

Target HD193237 Cal1 = HD191243 Cal2 = HD197392 Check = Target

06:08: Slewing to the target as a check star

06:25: E2 cart stuck. Rehoming

06:39: E2 is back.

06:52: NIRO Aligned.

06:56: Fringes found by CLIMB, a bit shaky but bright at least.

## HD193237.2020.06.12.06.59

E1: 3040

CLIMB\_B1= 6.02 CLIMB\_B2= 4.91

20 blocks

07:00: Nice fringes on VEGA.

07:09: Gong to Cal1.

 $r_0\sim6.5cm$ 

## HD191243.2020.06.12.07.17

E1: 3020 20 blocks

Shaky and faint fringes on CLIMB. Very weak peak on VEGA.

07:24: Fringes on CLIMB gets weaker. Fred think we are drifting during the observation.

 $r_0\sim6.5cm$ 

07:26: Done back to target

07:33: Norm cannot turn off the red LED on E2. He'll do a power cycle of the AOB.

#### HD193237.2020.06.12.07.43

E1: 2980 20 blocks

07:43: Shaky fringe on CLIMB but nice peak on VEGA.

07:09: Going to Cal1.

r<sub>0</sub>~6.5cm

09:52: Going to CAL2

#### HD197392.2020.06.12.07.58

E1: 2960

Shaky and faint fringes on CLIMB. Very weak peak on VEGA.

30 blocks r<sub>0</sub>~4.5cm

08:12: Done back to target

#### HD193237.2020.06.12.08.15

E1: 2980 20 blocks

Fred think the fringes are nicer than the previous observation of this target.

ro~5cm

08:12: Done back to CAL1 which seems better than CAL2.

#### HD191243.2020.06.12.08.32

E1: 3030 20 blocks

Less shaky and less faint fringes on CLIMB than before. Weak peak on VEGA. Maybe the seeing is getting better.

 $r_0\sim 6cm$ 

# 08:41: Done back to target

## HD193237.2020.06.12.08.45

E1: 3030 20 blocks It seems a bit better again. r<sub>0</sub>~5cm

08:55: Done back to CAL1

## HD191243.2020.06.12.09.00

E1: 3110 20 blocks

Almost nice fringes. Fairly stable and bright on CLIMB and strong peak on VEGA.

r₀~6cm

D\_CMR656.2020.06.12.09.13

# **S2 POP5 B1 – S1 POP4 B2 - W1 POP1 B3**

# V70 (R. Klement) – P Cyg

OPD offset: +150μm (left)

Target HD193237

Cal1 = HD191243

Cal2 = HD197392

**Check = Target** 

09:32: Periscopes stuck! Restarting server.

09:45: Still no periscope. Norm is going to the lab.

09:54: Fixed

#### HD193237.2020.06.12.10.07

S2: 1200

CLIMB\_B1= 7.91

CLIMB\_B2= 4.91

20 blocks

Nice fringes on CLIMB and peak on VEGA.

r₀~3cm

10:16: Done Let's go to CAL1.

10:28: Oups! The star is close to transit. Going to CAL2.

11:03: No fringe on CLIMB. Let's go back to CAL1.

# HD191243.2020.06.12.11:30

S2: 1360 20 blocks

Very shaky and weak fringes on CLIMB.

Very faint peak on VEGA

 $r_0\sim 5cm$ 

## HD193237.2020.06.12.11.48

S2: 1370 20 blocks

Ugly fringes on CLIMB (moving a lot). And not that good a peak on VEGA.

# HD191243.2020.06.12.12.03

S2: 1490
20 blocks
Less bad than before but still not good.
ro~5cm

D\_CMR656.2020.06.12.12.14